

CLAIMS

1. A method to produce a decay resistant and weatherproof wooden product (11) and to its qualities like impregnated wood and hardwood, for instance teak, in compressing and heating wood (1) into a wanted shape, **characterized** in that in the method a dried wood block (1) is pressed at least in one direction and the pressed wood block (1) kept in pressed shape, for instance between walls (6; 7), and shifted into a heating chamber, which to its cross-section is a closed chamber of predetermined shape and free from oxygen, whereby further in the said chamber the temperature of timber block (11) is quickly raised to 210-390°C and the timber block kept tight under controlled compression in different directions and that the timber block (11), still under compression, is quickly and controllably cooled, for instance placing it in a space between cooling walls (8).
2. A method according to claim 1 **characterized** in that the heating and cooling stages are carried out one after another in shifting the compressed timber block (11) through both of the said stages in the space between walls (6, 7, 8), that determine its outer dimensions.
3. A method according to claim 1 or 2 **characterized** in that wood block (1) is heated before compression.
4. A method according to claim 1 - 3 **characterized** in that the heating (7) and cooling (8) sections are placed one after another to form a common channel part, along which timber blocks (11) one after another are shifted through the sections the latter timber block pushing the former one directly or by means of intermediate bearing (6, 12).
5. A method according to claim 4 **characterized** in that the by means of the form of intermediate bearing (6, 12, 15) the form of the cross-section profile of the compressed timber block (11) is adjusted.
6. A method according to any claim 1 – 5 **characterized** in that the press part (3, 4, 5) and heating/cooling part (7, 8) work one after another in the same unit.
7. A method according to any claim 1 - 5 **characterized** in that the compressing part (3, 4, 5) and heating/cooling part (7, 8) work in the process as separate units.

8. A method according to any claim 1 - 7 **characterized** in that wood block (1) is treated before feeding into the process with a substance changing its qualities, such as fire retardant or another substance wanted.

9. A method according to any claim 1 - 8 **characterized** in that that the degree of moisture of wood block (1) coming to compression is less than 18%.